



ZEP Manufacturing Company
Acuity Specialty Products Group, Inc.
P.O. Box 2015
Atlanta, GA 30301
1-877-I-BUY-ZEP (428-9937)
www.zep.com

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name ZEPSTART ENGINE STARTER
Product Use Aerosol Engine Starting Fluid
Product Code 0306
Date of issue 12/22/04 **Supersedes** 09/24/97

Emergency For MSDS Information:
Telephone Acuity Specialty Products Group, Inc.
Numbers Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency
INFOTRAC:
(877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency
CHEMTREC:
(800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

Prepared by Compliance Services Group
Acuity Specialty Products Group
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

00378 B328
QUAIL RIDGE COUNTRY CLUB
354 GREAT ROAD
ACTON MA 01720

Printing date: 11/08/05

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
HEPTANE; n-heptane	142-82-5	65 - 75	ACGIH/OSHA (United States). TWA: 400 ppm 8 hour(s).
ETHYL ETHER; diethyl ether; ethane; 1,1-oxybis-	60-29-7	30 - 35	ACGIH/OSHA (United States). STEL: 400 ppm 15 minute(s). ACGIH TLV (United States). STEL: 400 ppm 15 minute(s). OSHA PEL (United States). TWA: 400 ppm 8 hour(s).

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Dermal contact. Eye contact. Inhalation.

Skin Hazardous in case of skin contact (irritant). Direct contact may cause irritation and redness.

Eyes Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Inhalation Hazardous in case of inhalation. Avoid breathing vapors or spray mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system depression.

Ingestion May be fatal if swallowed.

HMIS

Health	2
Flammability	4
Reactivity	0
Personal Protection	B

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse health effects are lessened by following all prescribed safety precautions, including use of proper personal protective equipment.

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects Inhalation of spray mists or vapors may cause central nervous system depression characterized by headache, dizziness, nausea, stupor, weakness and/or numbness and tingling in the extremities (medical term - peripheral neuropathy). Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Over exposure is unlikely to aggravate existing medical conditions. Repeated or prolonged exposure to the substance can produce target organs damage.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion Aspiration hazard if swallowed- can enter lungs and cause damage. Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head lower than hips to help prevent aspiration. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

Flash Point	Not available.	Flammable Limits	Not available.
Flammability	Extremely flammable. (CSMA)		
Fire Hazard	CONTENTS UNDER PRESSURE. Container explosion may occur under fire conditions or when heated. May emit toxic fumes under fire conditions. Vapors are heavier than air and may spread along floors.		
Fire-Fighting Procedures	Use dry chemical or CO ₂ . Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.		

Section 6. Accidental Release Measures

Spill Clean up	Large spills are unlikely due to packaging.
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Section 7. Handling and Storage

Handling	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Do not ingest. Keep away from heat, sparks and flame. Observe label precautions. Wash thoroughly after handling.
Storage	CONTENTS UNDER PRESSURE. Do not puncture or incinerate. Store and use away from heat, sparks, open flame, or any other ignition source. Keep container in a cool, well-ventilated area. Keep away from heat and direct sunlight. Do not store above 49°C (120.2°F). Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection**Personal Protection****Protective Clothing (Pictograms)**

Eyes	Safety glasses.	
Body	Viton gloves. Neoprene gloves. Rubber gloves. Nitrile gloves.	
Respiratory	Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate.	

Section 9. Physical and Chemical Properties

Physical State	Liquid. (Aerosol.)	Color	Clear. Colorless.
pH	Not available.	Odor	Ethereal. (Strong.)
Boiling Point	>35°C (95°F)	Vapor Pressure	Not determined.
Specific Gravity	0.7 (Water = 1)	Vapor Density	>1 (Air = 1)
Solubility	Very slightly soluble in cold water, hot water.	Evaporation Rate	>1 compared to Butyl acetate.
		VOC (Consumer)	708.78 (g/l). 5.91 lbs/gal 100.00%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive with oxidizing agents, acids. Incompatible with amines. Protect from temperature extremes and direct sunlight.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂)

Section 11. Toxicological Information

Toxicity to Animals	Not applicable.
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Section 12. Ecological Information

Ecotoxicity	Not available.
Biodegradable/OECD	Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.	Waste Stream	Code: D001 Classification: - (Hazardous waste.) Origin: - (RCRA waste.)
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Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name	Consumer Commodity	UN number	Not regulated.
DOT Classification	ORM-D		

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

Section 15. Regulatory Information**U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA inventory.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.